

DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES STATE OF FLORIDA
Reubin O'D. Askew, Governor

hhs POLK COUNTY HEALTH DEPARTMENT

DISTRICT OFFICES

1755 HOLLAND PKWY., SOUTH
BARTOW, FLORIDA 33830

P. O. BOX 691
HAINES CITY, FLORIDA 33844

P. O. BOX 334
LAKE WALES, FLORIDA 33853

103 EAST CANAL STREET
MULBERRY, FLORIDA 33860

WILLIAM F. HILL, JR., M.D.
DIRECTOR

P. O. BOX 1480
229 AVENUE D, N.W.

WINTER HAVEN, FLORIDA
33880

DISTRICT OFFICES

1333 NORTH FLORIDA AVE.
LAKELAND, FLORIDA 33801

P. O. BOX 33
WAVERLY, FLORIDA 33877

2 NORTH REEDY BLVD.
FROSTPOOF, FLORIDA 33843

243 E. LAKE AVENUE
AUBURNDALE, FLORIDA 33823

April 30, 1976

Barrett, Haentjens & Company
Hazleton, Pennsylvania 18201

SITE: Florida Phosphate
BREAK: 17.8
OTHER: v. 4

Dear Sir:

Enclosed you will find a gamma map of BARRETT, HAENTJEN & COMPANY of FLORIDA. The map is comprised of 12 internal gamma radiation readings and 14 external gamma radiation readings. The following is the interim guidelines set forth by the United States Environmental Protection Agency, they have been printed in the Federal Register.

INTERIM RECOMMENDATIONS FOR GAMMA EXPOSURE LEVELS
AT NEW STRUCTURED SITES ON FLORIDA PHOSPHATE LANDS

EXTERNAL GAMMA RADIATION LEVEL

RECOMMENDATIONS

Equal or greater than 10 uR/hr

Construction should be delayed pending additional study or acceptable control technology should be instituted to preclude indoor radon daughter problems.

Less than 10 uR/hr

Construction may be initiated.

As compared to the guideline, the readings taken at your plant do not meet the 10 uR/hr radiation level. But I would like to point out that the interim recommendations purpose is to limit radon daughter exposures in structures constructed on Florida phosphate lands.

Radon 222 is a radioactive daughter product of the uranium decay series. It in turn decays into other radioactive elements. The problem arises from the fact that Radon 222 is a gas that decays fairly rapidly and can be inhaled into the lungs. There it decays into radioactive solids, which, if present in large enough quantities can become cancer causative agents.



April 30, 1976

Although your plant has elevated gamma readings it is doubtful that you would have a large buildup of Radon 222 in your plant due to its construction.

I am making reference to the large entrances at both ends of your plant. These large openings should provide more than adequate ventilation for a structure of this size. We are in the process of obtaining equipment which will measure the amount of Radon present in a structure. This equipment should arrive later this summer. At that time we would be glad to further our investigation of your plant for you.

I would also like to point out that the recommendations set forth by the EPA are interim and a final report and regulations should be forth coming by the end of 1976.

Sincerely

Harlan Keaton
Industrial Hygienist II

HK:bb

POLK COUNTY HEALTH DEPARTMENT

FIELD REPORT ON BARRETT, HAENTJENS, & COMPANY OF FLORIDA

TOWN VISITED Mulberry - Highway 60 West DATE April 19, 1976

OWNER OF PROPERTY Barrett, Haentjens & Co. Hazleton, PERSON SEEN E. Diaz
PA

BY WHOM Harlan Keaton and Lee Forgey TIME SPENT 2 hours

REASON FOR VISIT Make gamma map of company built on reclaimed phosphate land.

REPORT: NO. μ R/hr

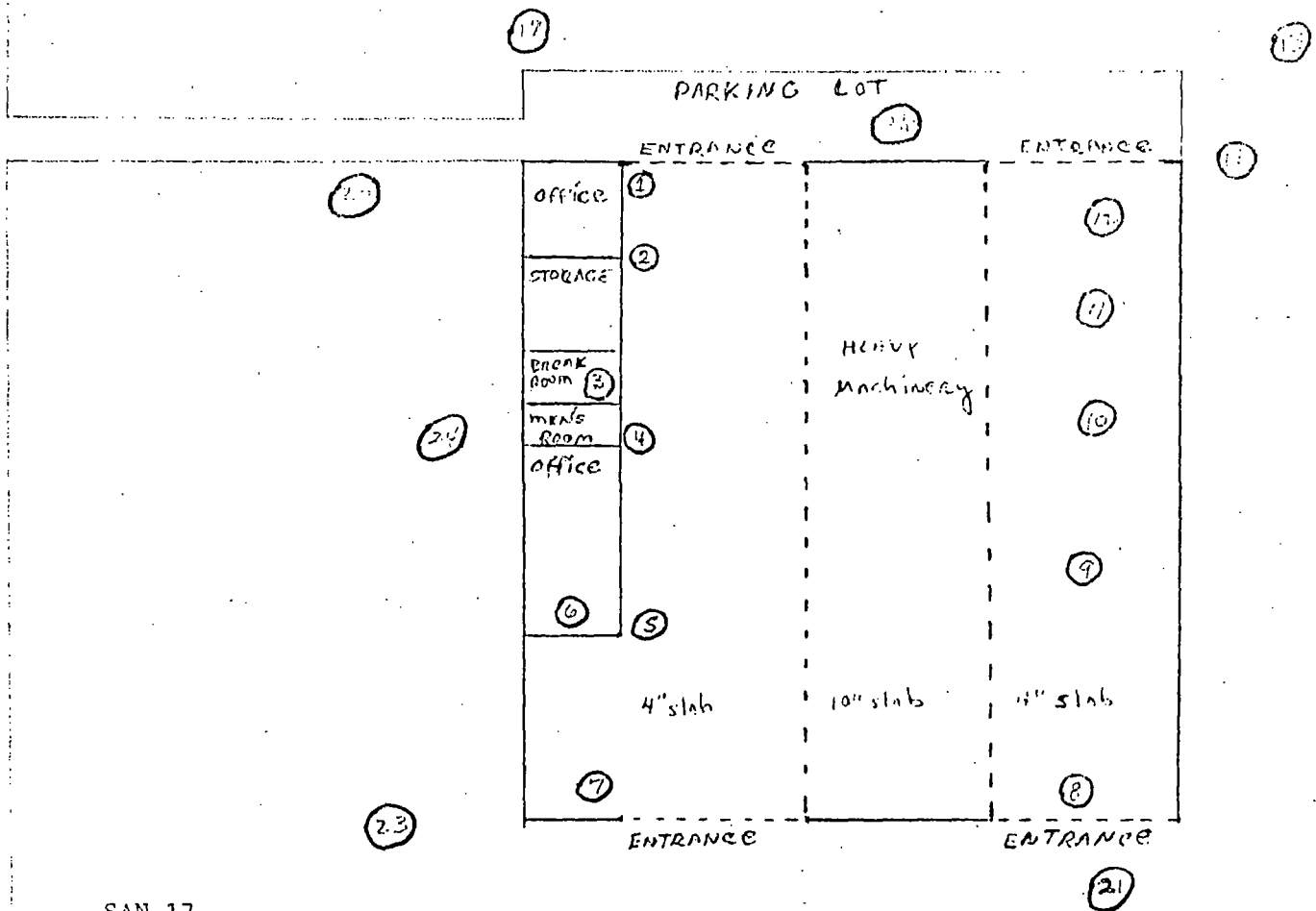
Column A	1 - 10.0
numbered	2 - 10.0
1-26 corresponds	3 - 13.0
to positions	4 - 10.2
numbered on	5 - 9.9
the attached	6 - 11.9
map.	7 - 10.4
Column B	8 - 16.0
represents	9 - 10.0
readings at	10 - 9.5
these positions	11 - 10.4
in Micro-	12 - 10.4
Roentgen per	13 - 18.6
hour	14 - 8.9
	15 - 8.6
	16 - 18.6
	17 - 13.6
	18 - 40.9
	19 - 35.3
	20 - 20.5
	21 - 24.2
	22 - 22.3
	23 - 31.6
	24 - 33.5
	25 - 33.5
	26 - 10.2

Readings 1-12 were all taken inside the building. Reading No. 8 may be elevated due to its closeness to the edge of the slab. (Compare reading No. 8 to reading No. 21 with 21 being outside the structure and off the slab but having a close proximity to No. 8). All other readings were taken outside the building. Note at position 18 there were large amounts of what appeared to be furnace slag which normally has an elevated gamma reading. Readings 14 and 15 were taken at fairly large distances from the building and may be in an area that has not been disturbed by mining operations.

POLK COUNTY HEALTH DEPARTMENT

FIELD REPORT ON BARRETT, HAENTJENS & COMPANY OF FLORIDA
 TOWN VISITED Mulberry - Highway 60 West DATE April 19, 1976
 OWNER OF PROPERTY Barrett, Haentjens & Co. Hazleton, PERSON SEEN E. Diaz
 BY WHOM Harlan Keaton and Lee Forgey PA TIME SPENT 2 hours
 REASON FOR VISIT Make Gamma Map of company built on reclaimed phosphate land.

REPORT:



SAN 17